FLUKE®

Digital Insulation Resistance Testers

you can depend on

Fluke 1550 MegOhmMeter™

Digital insulation testing up to 5000 Volts

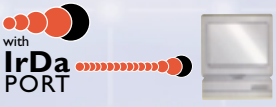
The Fluke 1550 is a digital insulation tester capable of testing switchgear, motors, generators and cables at up to 5000 V DC. It can be used for a wide range of tests: from simple spot checks to timed tests and breakdown tests. Measurement storage and PC interface software make it ideal for preventive maintenance. Heavy-duty leads, probes and alligator clips fit in the custom carrying case, for a rugged field testing kit.

- Test voltages of 500 V, 1000 V, 2500 V, 5000 V
- Measures up to 1 Tera-Ohm
- Warning voltage function alerts the user that line voltage is present and gives the voltage reading up to 600 V AC or DC
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Large digital/analog LCD shows detailed measurement data
- Cable or insulation capacitance
- Leakage current
- Ramp function (0-5000 V DC) for breakdown testing
- Timer for dielectric absorption and polarization index tests
- 99 memory locations store all measurements parameters
- High capacity rechargeable batteries
- Mobile (Car) charging adapter for DC charging
- Includes Quicklink 1550 Software and Optical Interface cable
- Two year warranty

Quicklink Software

The Fluke 1550 comes with Quicklink software and has on-board memory to store individual test results. These can be down-loaded to a serial printer or computer through the integral Infrared Communication port (IRDA PORT).

Fluke Quicklink 1550 Software requires a PC running Windows® 95, 98, Me, 2000, NT4.0; Software available in several languages.



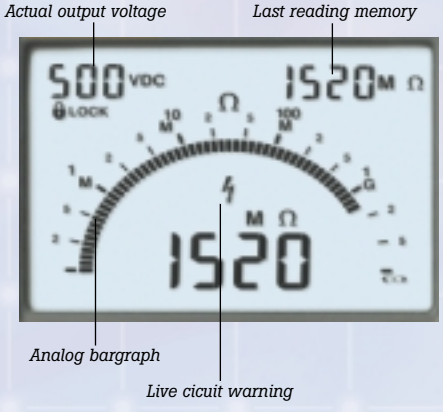
Large, digital display with analog bar graph.

Fluke 1520 MegOhmMeter

Digital insulation testing up to 1000 V

The Fluke 1520 MegOhmMeter is a handy insulation resistance tester for testing insulation in power system wiring and motor winding. It also measures voltage and checks continuity and ground connections with its Lo-Ohms function. Easy to use with a simple user interface, the 1520 provides insulation resistance testing up to to 4000 MΩ, with three output voltages: 250 V, 500 V and 1000 V.

- Large, backlit LCD with analog bargraph and digital display
- Three output voltages for insulation resistance testing: 250 V, 500 V, 1000 V
- Insulation resistance testing up to 4000 MΩ; switches automatically to voltage measurement when voltage is greater than 30 V AC or 30 V DC
- AC/DC voltage measurement up to 600 V
- Lo-Ohms function for testing connections
- Last reading memory display
- 4 C-cell batteries for up to 5,000 tests, with battery-life indicator and auto shut-off
- Autodischarge of capacitive voltage charges
- Rugged, splash-proof case with impact absorbing holster
- Three year warranty



Large, backlit digital display with analog bar graph.

Safety conformance

All inputs are protected to IEN61010-1 CAT III 600 V and the 1520 is compliant to EN 61557/VDE 0413.

Specifications 1520

Function	Range	Accuracy	Resolution
Insulation Resistance			
Auto ranges	4.000 MΩ, 40.00 MΩ, 400.0 MΩ, 4000 MΩ	To 100MΩ: 2% + 2 counts over 100 MΩ,: 10% + 2 counts + 1%/GΩ,	0.001 MΩ, to 10 MΩ,
Test voltages	250 V, 500 V, 1000 V	+ 20%, - 0%	
Max. measurement current	1mA		
Audible/visible voltage warning	≥ 30 V AC or DC		
Lo-Ohms			
Resistance	0 to 40.00 Ω,	2% + 2 counts	0.01 Ω,
Analog Bar Graph	0 to 100 Ω,		
Audible/visible voltage warning	≥ 30 V AC or DC		
Resistance			
Resistance	4000 Ω	2% + 2 counts	1 Ω,
Analog Bar graph	0 to 10 kΩ,		
Voltage			
Voltage	0 to 600 V AC (50/60 Hz)	2% + 2 counts	1 V

Mechanical Specifications	
Dimensions (L x W x H)	241 mm x 108 mm x 72 mm
Weight (with battery)	1.1 kg

Power	
Battery type	4 C Size 1.5 V alkaline
Battery life (typical)	up to 5.000 tests per EN 61557-2

Environmental Specifications	
Operating temperature	-10°C to 50°C
Storage temperature	-40°C to 70°C
Relative humidity (without condensation)	75% RH (40°C)
Operating altitude	2500 meters
Enclosure sealing	IP-54 per IEC 529
Shock, vibration	Per IEC 1010-1
EMI immunity	EN 61326-1
Safety	EN 61010-1, CAT III, 600 V, EN61557
Max.Operating Voltage	600 V AC or DC between any terminal and earth ground

Specifications 1550

Electrical Specifications

All stated accuracy tolerances apply to the temperature range 0°C to 35°C. For operating temperatures between –20°C to 0°C and 35°C to 40°C, these tolerances double.

Insulation Resistance Measurement		
Test Voltage (DC)	**Range**	**Accuracy (± reading)**
500 V	200 kΩ to 10 GΩ 10 GΩ to 100 GΩ	5% 20%
1000 V	200 kΩ to 20 GΩ 20 GΩ to 200 GΩ	5% 20%
2500 V	200 kΩ to 50 GΩ 50 GΩ to 500 GΩ	5% 20%
5000 V	200 kΩ to 100 GΩ 100 GΩ to 1 TΩ	5% 20%
Short circuit current	greater than 1 mA and less than 2 mA	
Bar graph range	0 to 1 TΩ	
Insulation test voltage accuracy	0% to +10% at 1 mA load current	
Induced AC mains current rejection	2 mA maximum	
Charging rate for capacitive load	5 seconds per µF	
	Range	**Accuracy (± reading)**
Leakage current	1 nA to 2 mA	± (5% + 2 nA)
Capacitance measurements	0.01 µF to 15.00 µF	± (15% rdg + 0.03 µF)
Live circuit indicator	30 V to 600 V AC/DC, 50/60 Hz	± (5% + 2 V)
Timer	0 to 99 minutes; settable in 1 minute increments; indicated to within 1 second	
Ramp	0% to 100% of selected test voltage, or until breakdown	

Mechanical Specifications	
Dimensions (L x W x H)	170 mm x 242 mm x 330 mm
Weight (with battery)	4 kg

Power		
Battery type	12 volt, lead-acid, rechargeable	
Charger input (AC)	85 to 250 V AC 50/60 Hz 50 VA	
Charger input (DC car adapter)	10 to 15 V DC, 30 VA	
	Test voltage	**Number of tests**
Battery life (typical) Note: At higher temperatures, the battery requires more frequent charging.	500 V 1000 V 2500 V 5000 V	3600 3200 2500 1500

Environmental Specifications	
Operating temperature	–20°C to 40°C
Storage temperature	–20°C to 65°C
Relative humidity	80% at 31°C decreasing linearly to 50% at 40°C
Operating altitude	0 to 2000 meters
Enclosure sealing	IP-40
Shock, vibration	MIL-PRF-28800F, CLASS II
EMI immunity	EN 61326
Safety	EN 61010-1, CAT III, 600 V, EN61557, PARTS 1 & 2
Input Overload Protection	600 V AC continuous

Fluke 1520 and 1550 MegOhmMeters

Features and specifications at a glance

Function	1520	1550
Auto range	Up to 4000 MΩ	Up to 1 TΩ
Test voltage (DC)	250 V , 500 V, 1000 V	500 V, 1000 V, 2500 V, 5000 V
Max. measurement current	1 mA	1 mA < I ≤ 2 mA
Audible/visible voltage warning	≥ 30 V AC or DC	≥ 30 V AC or DC
Resistance lo-ohms	0 to 40.00 Ω	–
Resistance (max.)	4000 Ω	–
Voltage	0 – 600 V AC	–
Leakage current	–	1nA to 2 mA +/- (5% + 2 nA)
Capacitance range	–	0.01 µF to 15.00 µF
General specifications		
Warranty in years	3	2
Battery life (typical)	5.000 test	up to 3.600 tests (500 V tests)
Safety rating	CAT III 600 V	CAT III 600 V

Fluke 1550

Included Accessories

- Test leads, 5000 V-rated probes
- Alligator clips
- Interface adapter and cable
- Quicklink 1550 PC software
- DC (Car) charging adapter
- Line cord
- Soft carrying case with water-proof bottom
- User's manual

Fluke. *Keeping your world up and running.*

Fluke 1520

Included Accessories

- TL27 heavy duty test leads
- TP74 lantern test probes
- AC86 large jaw alligator clips
- Protective holster with hand strap
- Carrying case
- User's manual

Fluke 1520

Optional Accessories

- SH100 shoulder strap
- TPAK strap and magnet

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Printed in the Netherlands 02/01.
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Pub_ID: 10479-eng
Rev. 01